

WHAT IS CLAIMED IS:

1. A process for a spinning arrangement for dealing with the correction of an end break in this arrangement, during the operation of which sliver-like fiber material fed to the spinning arrangement is opened to single fibers by means of an opening roller, the single fibers are transferred in the form of a fiber veil to a suctioned collecting surface, which is driven in the direction of motion of the single fibers, the fiber veil is condensed to a narrow fiber strand on the collecting surface and the condensed fiber strand is spun to a yarn downstream of a nipping line by means of a twisting nozzle, wherein, in the case of an end-break, the feed of fiber material is interrupted and the fiber strand is suctioned in the area of the nipping line until the collecting surface is free of single fibers.
2. A process according to claim 1, wherein, in order to set the spinning arrangement in operation again, the feed of fiber material is set in motion again and subsequently the newly fed fiber strand, which is fed over the collecting surface, is again suctioned for a specific length of time in the area of the nipping line and then, for the transfer of the fiber strand to the twist nozzle, the suction action is de-activated.
3. A process according to claim 1, wherein, subsequent to the suctioning of the fiber strand, the drive of the collecting surface is interrupted and subsequently a piecing yarn is threaded backwards in the opposite direction to the operational delivery direction through the twist nozzle to the area of the opening roller and disposed onto the collecting surface, whereafter in order to set the spinning arrangement in operation again the feed of fiber material is set in motion again and the drive for the collecting surface is activated again.
4. A process according to claim 1, wherein subsequent to the suctioning of the fiber strand while the collecting surface is rotating temporarily in the opposite direction to the operational direction of motion, a piecing yarn is guided backwards in the opposite direction to the operation delivery direction through the twist nozzle to the area of the opening roller, where in order to set the spinning arrangement in operation again the feed of fiber material is set in motion and the drive of the collecting surface is set in operational direction of motion again.
5. A process according to claim 3, wherein the guiding backwards of the piecing yarn is supported by an auxiliary nozzle.

6. A process according to claim 4, wherein the guiding backwards of the piecing yarn is supported by an auxiliary nozzle.

7. A process for repairing a yarn end break in a spinning arrangement which includes:

a feeding device operable to feed a fiber silver,

an opening device disposed downstream of the feeding device and operable to open said fiber silver into single fibers,

a movable collecting surface disposed downstream of the opening device and operable to receive the single fibers from the opening device in the form of a fiber veil which is condensed to a fiber strand as it is transported by the collecting surface in a first normal spinning direction,

a nipping line disposed at a downstream end of the collecting surface fiber veil travel path, and

a twisting device disposed downstream of the nipping line and operable to twist the condensed fiber strand to form yarn, said process comprising:

interrupting feed of fiber silver by the feeding device in an event of a broken yarn end, and

removing the fiber strand from the collecting surface by applying suction in an area of the nipping line until the collecting surface is substantially free of fibers.

8. A process according to Claim 7, wherein, in order to set the spinning arrangement in operation again, the feed of fiber material is set in motion again and subsequently the newly fed fiber strand, which is fed over the collecting surface, is again suctioned for a specific length of time in the area of the nipping line and then, for the transfer of the fiber strand to the twisting device, the suction action is de-activated.

9. A process according to Claim 7, wherein subsequent to the suctioning of the fiber strand, the drive of the collecting surface is interrupted and subsequently a piecing yarn is guided backwards in the opposite direction to the operational delivery direction through the twisting device to the area of the opening roller and disposed onto the collecting surface, whereafter in

order to set the spinning arrangement in operation again the feed of fiber material is set in motion again and the drive for the collecting surface is activated again.

10. A process according to Claim 7, wherein subsequent to the suctioning of the fiber strand while the collecting surface is rotating temporarily in the opposite direction to the operational direction of motion, a piecing yarn is guided backwards in the opposite direction to the operation delivery direction through the twisting device to the area of the opening roller, where in order to set the spinning arrangement in operation again the feed of fiber material is set in motion and the drive of the collecting surface is set in operational direction of motion again.

11. A process according to Claim 9, wherein the guiding backwards of the piecing yarn is supported by an auxiliary nozzle.

12. A process according to Claim 10, wherein the guiding backwards of the piecing yarn is supported by an auxiliary nozzle.

13. A process according to Claim 7, wherein the opening device is an opening roller.

14. A process according to Claim 7, wherein the twisting device is a twist nozzle.

15. A process according to Claim 7, wherein the collecting surface is perforated and condensing of the fiber veil utilizes a suction device acting on the collecting surface.

16. Apparatus for repairing a yarn end break in a spinning arrangement which includes:

a feeding device operable to feed a fiber silver,

an opening device disposed downstream of the feeding device and operable to open said fiber silver into single fibers,

a movable collecting surface disposed downstream of the opening device and operable to receive the single fibers from the opening device in the form of a fiber veil which is condensed to a fiber strand as it is transported by the collecting surface in a first normal spinning direction,

a nipping line disposed at a downstream end of the collecting surface fiber veil travel path, and

a twisting device disposed downstream of the nipping line and operable to twist the condensed fiber stand to form yarn, said apparatus comprising:

means for interrupting feed of fiber silver by the feeding device in an event of a broken yarn end, and

means for removing the fiber strand from the collecting surface by applying suction in an area of the nipping line until the collecting surface is substantially free of fibers.

17. Apparatus according to Claim 16, wherein means are provided to set the spinning arrangement in operation again, and

wherein, in order to set the spinning arrangement in operation again, the feed of fiber material is set in motion again and subsequently the newly fed fiber strand, which is fed over the collecting surface, is again suctioned for a specific length of time in the area of the nipping line and then, for the transfer of the fiber strand to the twisting device, the suction action is de-activated.

18. Apparatus according to Claim 16, wherein means are provided to set the spinning arrangement in operation again, and

wherein, subsequent to the suctioning of the fiber strand, the drive of the collecting surface is interrupted and subsequently a piecing yarn is guided backwards in the opposite direction to the operational delivery direction through the twisting device to the area of the opening roller and disposed onto the collecting surface, whereafter in order to set the spinning arrangement in operation again the feed of fiber material is set in motion again and the drive for the collecting surface is activated again.

19. Apparatus according to Claim 18, wherein means are provided to set the spinning arrangement in operation again, and

wherein, subsequent to the suctioning of the fiber strand while the collecting surface is rotating temporarily in the opposite direction to the operational direction of motion, a piecing yarn is guided backwards in the opposite direction to the operation delivery direction through the twisting device to the area of the opening roller, where in order to set the spinning arrangement in operation again the feed of fiber material is set in motion and the drive of the collecting surface is set in operational direction of motion again.

20. Apparatus according to Claim 18, wherein the guiding backwards of the piecing yarn is supported by an auxiliary nozzle.
21. Apparatus according to Claim 19, wherein the guiding backwards of the piecing yarn is supported by an auxiliary nozzle.
22. Apparatus according to Claim 16, wherein the opening device is an opening roller.
23. Apparatus according to Claim 16, wherein the twisting device is a twist nozzle.
24. Apparatus according to Claim 16, wherein the collecting surface is perforated and condensing of the fiber veil utilizes a suction device acting on the collecting surface.